



# STATE OF MONTANA

## MONTANA DEPARTMENT OF TRANSPORTATION

### JOB PROFILE AND EVALUATION

☒ Conversion  
☒ Update  
☐ Informal Review  
☒ Formal Review

#### SECTION I - Identification

Working Title:	Traffic Technician	Department	MDT
Job Code Number:	173213	Division & Bureau	Planning
Job Code Title:	Civil Engineering Tech	Section & Unit	Traffic Data Collection
Pay Band:	3		
Position Number :	26003/26024/26056	Phone	444-3423
Work Address	2550 Prospect Avenue; Helena, MT 59601		

☐ FLSA Exempt ☒ FLSA Non-Exempt

Profile done by: Bill Cloud Work Phone 444-6114

#### Work Unit Mission Statement or Functional Description

The Traffic Data Collection Section collects, analyzes and summarizes traffic characteristics and statistics about Montana's public roadway systems. Traffic characteristics information is essential for the administration, development, construction, maintenance, and operation of the federally mandated Traffic Monitoring System (TMS) and Highway Performance Monitoring System (HPMS). The Traffic Data Collection Section also provides traffic data to the state's transportation database that supports other management systems.

#### Describe the Job's Overall Purpose:

Monitor traffic volume and flow. Collect traffic characteristics and traffic-related information. Complete general maintenance of traffic monitoring, and associated equipment.

#### SECTION II - Major Duties or Responsibilities

#### Percent of Time

Conducts Traffic Surveys	100%
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The Traffic Technician:

Uses solid-state micro-processing traffic recorders to monitor and collect traffic volumes, vehicle types, vehicle speeds, and any other information pertaining to vehicle travel or use of highway facilities.

Locates monitoring site, ensuring that recorder can be secured and that safety precautions are in accordance with policies.

Installs vehicle detectors on roadway surface to specifications required for monitoring application.

Programs recorders for monitoring application configuration, setup, and calibration.

Performs approximately 170 to 200 visual multi-detail traffic counts per year.

Retrieves, records, and categorizes 1,300-1,600 annual recorder data recordings onto a laptop computer and transfers the data via email to the scheduler.

Checks completeness, uniformity and integrity of traffic data compared with other data collected in the area, historic data, and common hourly traffic patterns.

Performs and records general preventive and routine equipment maintenance on traffic survey equipment.

Monitors areas where traffic data is collected for land use changes, new development, or other conditions that may affect traffic.

Performs traffic data collection rest area studies reflecting the overall facilities use.

Maintains assigned vehicle. Ensures it is serviced using a strict preventive maintenance schedule.

Prepares required work-related reports.

1. Specific examples of problems solved, decisions made, or procedures followed when performing the most frequent duties of this position.

The Traffic Technician has a general schedule each week, but must use own judgment as to a good location for the equipment to correctly function. The technician checks equipment to verify the equipment is functioning correctly. The technician downloads the data twice a week making sure the identification and counter setup is correct. The technician then e-mails the data into the office.

2. The most complicated aspect of this position is?

The technician must use judgment when setting up the traffic recorders and properly stretching hoses across the roadway. The technician needs to place the recorder in a location that will not cause equipment errors, watch for traffic for safety reasons, evaluate the traffic patterns, and report any unusual activities that can affect the count (events, construction, etc.).

3. Guidelines, manuals or written procedures that support this position.

Traffic monitoring schedule book  
Equipment manuals  
Traffic monitoring systems handbook  
Montana maps

4. Does this position supervise others? ☐ Yes ☒ No

Number directly supervised: .  
Complexity level of the positions supervised .  
Position Number(s) of those supervised .

5. This position is responsible for:

<input type="checkbox"/> Hiring	<input type="checkbox"/> Firing	<input type="checkbox"/> Supervision	<input type="checkbox"/> Pay Level
<input type="checkbox"/> Performance Management		<input type="checkbox"/> Promotions	<input type="checkbox"/> Discipline
<input type="checkbox"/> Other:			

6. Attach an Organizational Chart.

### **SECTION III - Minimum Qualifications** - List minimum requirements for the **first day** of work.

#### **Critical knowledge and skills required for this position:**

##### **Knowledge of:**

**Equipment** — Electronic monitoring equipment, and desktop and laptop computers.

**Mathematics** — Arithmetic

**Transportation** — Basic knowledge of transportation principles/methods for highways

**Engineering and Technology** — Practical application of electronic traffic monitoring equipment.

**Design** — Basic knowledge of highway design and geometrics.

**Public Safety and Security** — Knowledge of relevant equipment, policies, procedures, and strategies to ensure the safety of the technician and the traveling public.

**Computers and Electronics** — Basic knowledge of circuit boards, processors, chips, electronic equipment, and computer hardware and software.

##### **Skill in:**

**Tools** — Use of small hand tools required for maintenance and repair of electronic equipment.

**Mathematics** — Using mathematics to solve problems.

**Complex Problem Solving** — Identifying complex problems and reviewing related information to develop and evaluate options and implement solutions.

**Active Listening** — Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.

**Critical Thinking** — Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.

**Writing** — Communicating effectively in writing as appropriate for the needs of the audience.

**Speaking** — Talking to others to convey information effectively.

**Active Learning** — Understanding the implications of new information for both current and future problem-solving and decision-making.

**Operations Analysis** — Analyzing needs and product requirements to create a design.

**Judgment and Decision Making** — Considering the relative costs and benefits of potential actions to choose the most appropriate one.

**Systems Analysis** — Determining how a system should work and how changes in conditions, operations, and the environment will affect outcomes.

##### **Abilities:**

**Mathematical Reasoning** — The ability to add, subtract, multiply, or divide correctly, and ability to choose the right mathematical methods or formulas to solve a problem.

**Near Vision** — The ability to see details at close range (within a few feet of the observer).

**Inductive Reasoning** — The ability to combine pieces of information to form general rules or conclusions (includes finding a relationship among seemingly unrelated events).

**Far Vision** — The ability to see details at a distance.

#### **Behaviors required to perform these duties?**

**Loyalty and Dedication** - Aligns actions and activities with the needs and goals of the organization. Demonstrates individual effort in support of organizational mission and goals Aligns own activities and priorities to meet organizational needs

**Communication** - Provides timely and concise information to others verbally, nonverbally and in writing and helps others communicate effectively.

**Responsiveness** - Assumes responsibility for and delivers on commitments. Shows initiative to pursue assignments to completion

**Writing Effectively** - Writes clearly, logically and effectively; eliminates unnecessary detail

**Decisiveness** - Makes decisions on a variety of issues using the appropriate sets of facts  
**Initiative** - Recognizes what needs doing and does it without being told  
**Efficiency** - Maintains focus on the achievement of established goals or solutions  
**Quality** - Follows appropriate procedures without taking shortcuts  
**Results Oriented** - Demonstrates energy and enthusiasm to bring projects or tasks to completion  
**Responsibility** - Takes effective action, when appropriate, without being told  
**Self-starter** - Takes effective and appropriate action without being told

### **Education:**

Check the one box indicating **minimum** education requirements for this position for a new employee the **first day** of work:

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> No formal education required | <input type="checkbox"/> Bachelor's Degree |
| <input type="checkbox"/> 1-year college/voc. training            | <input type="checkbox"/> Master's degree   |
| <input type="checkbox"/> AAS/2-years College/vocational training |  |

Specify the acceptable bachelor's degrees: N/A

Specify the related bachelor's degrees: N/A

Specify other training, coursework or licensure: Graduation from High School or equivalent required.  
 Course work in electronics or an associated field desirable, but not required.

Will a master's degree substitute for the required experience? N/A If yes, specify degrees:

- ☐ One year      ☐ Two years

Will experience substitute for the degree requirement? If yes, specify experience: N/A

### **Experience:**

Check the one box indicating **minimum** work-related experience requirements for this position for a new employee the **first day** of work:

- |   |   |
|---|---|
| <input type="checkbox"/> None               | <input type="checkbox"/> 6 years                  |
| <input type="checkbox"/> 1 year             | <input type="checkbox"/> 7 years                  |
| <input checked="" type="checkbox"/> 2 years | <input type="checkbox"/> 8 years                  |
| <input type="checkbox"/> 3 years            | <input type="checkbox"/> 9 years                  |
| <input type="checkbox"/> 4 years            | <input type="checkbox"/> 10 years                 |
| <input type="checkbox"/> 5 years            | <input type="checkbox"/> Other _____(be specific) |

Other specific experience (optional): Requires training or experience with computers, plus two years experience in a position that uses judgment, and demonstrates the ability to work independently.

### **Alternative Qualifications:**

This agency will accept alternative methods of obtaining necessary qualifications.

- ☐ Yes    ☒ No

### **SECTION IV – Other Important Job Information**

Requires extensive overnight travel during the weekdays and occasionally weekends; averages approximately 35,000 miles of travel per year; work is completed in diverse conditions such as on or near roadways where traffic is often traveling at 75+ miles per hour as well as in very remote areas of the state. All duties of this position are performed in the field therefore incumbent must work under varying conditions and weather. This position requires a Montana Driver's License, or a valid Driver's License from another state and the ability to obtain a Montana License within 30 days. Maintaining a valid Montana Driver's License and insurability is a continued requirement of this position.

## **SECTION V – Signatures**

Signature indicates this statement is accurate and complete.

### ***Employee:***

Name: Title

Signature Date

### ***Immediate Supervisor:***

Name: Title

Signature Date

### ***Division/District Administrator:***

Name: Title

Signature Date

### ***Department Designee:***

Jean Bond Chief, Employee Relations Bureau  
Name: Title

Signature Date

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***Recruitment Review:*** My signature below attests to my review of and determination that the minimum qualifications (education and experience) listed in this profile meet the established recruitment standards of MDT.

Name: Human Resource Specialist (Helena/District)  
Title

Signature Date